

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Addease COMMISSIONER FOR PATENTS PO Box 1430 Alexandria, Virginia 22313-1450 www.webjo.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|--|-------------|-------------------------|---------------------|-----------------|
| 10/587,111 | 07/24/2006 | John William Richardson | PU030288 | 9520 |
| 24498 7590 0425/2011 Robert D. Shedd, Patent Operations | | | EXAM | INER |
| THOMSON Licensing LLC | | | KIM, HEE-YONG | |
| P.O. Box 5312 Princeton, NJ | | | ART UNIT | PAPER NUMBER |
| | | | 2482 | |
| | | | | |
| | | | MAIL DATE | DELIVERY MODE |
| | | | 04/25/2011 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

| Application No. | Applicant(s) | Applicant(s) | | | |
|-----------------|-------------------|-------------------|--|--|--|
| 10/587,111 | RICHARDSON ET AL. | RICHARDSON ET AL. | | | |
| Examiner | Art Unit | | | | |
| HEE-YONG KIM | 2482 | | | | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS,

- WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

 Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filled

| If NO Failure Any re | SIX (§) MONTHS from the mailing date of this communication. SIX (§) MONTHS from the mailing date of this communication period for reply as specified above, the maximum statutory period will apply and will expire SIX (§) MONTHS from the mailing date of this communication to the communication of the control of the period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). By the control of the period to the period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). By the communication of the period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). By the communication of the period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). By the communication of the period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). By the communication of the period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). By the communication of the period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). By the communication of the period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). By the communication of the period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). By the communication of the period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). By the communication of the period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). By the communication of the period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). By the communication of the period for reply will be application to be |
|--|---|
| Status | |
| 1)🛛 | Responsive to communication(s) filed on 24 March 2011. |
| 2a)🛛 | This action is FINAL . 2b) ☐ This action is non-final. |
| 3) | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is |
| | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. |
| Disposition | on of Claims |
| 4) 🛛 | Claim(s) <u>25,28-36 and 39-45</u> is/are pending in the application. |
| | a) Of the above claim(s) is/are withdrawn from consideration. |
| 5) | Claim(s) is/are allowed. |
| 6)🛛 | Claim(s) <u>25,28-36 and 39-45</u> is/are rejected. |
| 7) | Claim(s) is/are objected to. |
| 8) | Claim(s) are subject to restriction and/or election requirement. |
| Application | on Papers |
| 9) 🔲 🗆 | The specification is objected to by the Examiner. |
| 10) 🔲 7 | The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. |
| | Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). |
| | Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d) |
| 11) 🔲 🗆 | The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. |

Priority under 35 U.S.C. § 119

| 12) Acknowle | edgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). |
|--------------|---|
| a)□ All b |) Some * c) None of: |
| 1.□ C | ertified copies of the priority documents have been received. |
| 2.☐ C | ertified copies of the priority documents have been received in Application No |
| 3.☐ C | opies of the certified copies of the priority documents have been received in this National Stage |
| ap | oplication from the International Bureau (PCT Rule 17.2(a)). |
| * See the a | ttached detailed Office action for a list of the certified copies not received. |

| Attachment(s) | | |
|---|---|--|
| Notice of References Cited (PTO-892) | 4) Interview Summary (PTO-413) | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date | |
| Information Disclosure Statement(s) (PTO/SB/08) | Notice of Informal Patent Application | |
| Paper No(s)/Mail Date | 6) Other: . | |

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DETAILED ACTION

Response to Amendment

- 1. This office action is in reply to Applicant's Response dated March 24, 2011.
- Claims 25, 28-36, and 39-45 are pending.

Response to Arguments

- Applicant's arguments with respect to the prior art rejection over claims 25, 28-36 and 39-45 have been fully considered but they are not persuasive.
- 4. Regarding claims 25-27, 32, 34-38, 43 and 45-47, Applicant argues (pp.5-6) that Visharam does not teach "embedding the parameter information in a session Description Protocol (SDP) payload of a hint track of the file", because Visharam discloses that SEI message carries the optional data not necessary for decoding data. The examiner respectfully disagrees. At first, the plain meaning of "parameter information" can be any kind of information regarding constant or variable. Secondary, Visharam discloses that SEI is used in the decoding of corresponding slices (it was well known that slice is a part of a frame in a compressed video) in paragraph 53. Applicant further argues (pp.6) that Visharam does not teach storage of SEI message. However, Jones discloses that SDP is stored in a hint track (SDP information is stored in userdata atoms in the hint track, col.24, line 55-57) of the file and Visharam discloses that SEI is embedded in SDP. Therefore, Jones and Visharam teaches the above feature. The applicant further argues (pp.6) that Visharam teaches away from applicants' claimed features of "contemporaneously transmitting" the parameter information and the

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video information. First of all, there is no limitation "contemporaneously transmitting" in the claims. Even claim 34 has features delayed transmission (transmitting the parameter information prior to the any media corresponding too). The applicant further argues (pp.6) that Visharam's decoupling of parameter set data from the media data is clearly contrary to the contemporaneously transmitting. Examiner maintains that decoupling of parameter set data from the media data does not necessarily means transmitting one data distant from the other. Since Visharam discloses that SEI is used in decoding corresponding slice, it was obvious that SEI information should be sent around the same time as the corresponding slice, in order to decode the particular slice in real time.

5. Regarding claims 28-31, 33, 40-42 and 44, applicant argues (pp.7-9) that none of the prior arts teaches the above mentioned feature, ""embedding the parameter information in a session Description Protocol (SDP) payload of a hint track of the file". Since the examiner maintains that Jones and Visharam teaches the feature as explained above, the argument is groundless.

Claim Objections

6. Dependent claim 35 is objected to because it is directed towards nonstatutory subject matter. The invention claims "A file containing video information and parameter information". File is neither a process nor machine nor manufacture nor a composite matter. Therefore, it is non-statutory under 35 U.S.C. 101 Appropriate correction is required.

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Claim Rejections - 35 USC § 103

 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

 Claims 25-27, 32, 34-38, 43, and 45-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones (US 6,134,243) in view of Visharam (2004/0,006,575), hereafter referenced as Jones and Visharam.

Regarding claim 25, Jones discloses Method and Apparatus for Media Data
Transmission. Jones specifically discloses A method for streaming a file containing
video information (streaming of media data, col.9, line 20), comprising the step of:
embedding parameter information (Hint track includes header information, col.9, line 2839) for facilitating streaming of the video information (instruction for a streaming video,
col.9, line 28-39) by embedding the parameter information in a hint track, the file also
holding the video information such that the parameter information resides separate hint
area (separate and distinct from media data, col.8, line 27-30) from the video
information so that the parameter information can be streamed independent of the video
information (Fig.15). In addition Jones discloses that SDP is stored in a hint track (SDP
information is stored in user-data atoms in the hint track, col.24, line 55-57) of the file.

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However, Jones is silent on embedding the parameter information in a Session Description Protocol (SDP) payload.

In the analogous field of endeavor, Visharam discloses Method and Apparatus for Supporting Advanced Coding Formats in Media Files. Visharam discloses specifically embedding the parameter information (SEI is meta data separately from media data, paragraph 47), in a Session Description Protocol (SDP) payload (SEI message is signaled by external means (SDP), paragraph 172).

Therefore, given this teaching, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Jones by providing specifically embedding the parameter information in SDP payload of a hint track, in order to provide parameter information compatible with standard description protocol. The Jones method, incorporating the Visharam embedding the parameter information in SDP payload, has all the features of claim 25.

Regarding claim 32, Jones and Visharam disclose everything claimed above (see claim 25). In addition, Jones discloses further comprising the step of transmitting the parameter information in a media independent transmission (Jones: network-independent, col.9, line 59-60).

Regarding **claim 34**, Jones and **V**isharam disclose everything claimed above (see claim 25). In addition, Jones discloses further comprising the step of extracting the parameter information from metadata corresponding to at least one media stream (hint packets received, col.18, line 1-2)

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Regarding claim 35, Jones and Visharam disclose everything claimed above (see claim 25). In addition, Jones disclose A file containing video information and parameter information (file containing media data and hint track, col.8, line 27-30), the parameter information embedded in a portion of the file separate from the video information (hint area separate and distinct from media data, col.8, line 27-30) so that the parameter information can be streamed independent of the video information (Fig.15).

Regarding claim 36, the claimed invention is an apparatus claim corresponding to the method claim 25. Therefore, it is rejected for the same reason as claim 25.

Regarding claim 43, the claimed invention is an apparatus claim corresponding to the method claim 32. Therefore, it is rejected for the same reason as claim 32.

Regarding claim 45, the claimed invention is an apparatus claim corresponding to the method claim 34. Therefore, it is rejected for the same reason as claim 34.

 Claims 28 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones in view of Visharam, further in view of Mononen (US 2005/0,004,968) (hereafter referenced as Mononen).

Regarding claim 28, Jones and Visharam disclose everything claimed as above (see claim 25). However, Jones fails to disclose wherein the step of embedding the parameter further comprises the step of encoding the parameter information in Multipurpose Internet Mail Extensions (MIME) prior to being embedded within the SDP payload of the Hint track.

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In analogous field of endeavor, Mononen discloses System, Apparatus, And Method for a Mobile Information Center. Mononen specifically discloses encoding in Multipurpose Internet Mail Extensions (MIME) prior to being embedded within the SDP payload (Fig.2 shows MIME encoding 236 prior to SDP 228), in order to provide rich content communication including voice and video through internet (paragraph 2).

Therefore, given this teaching, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Jones and Visharam by providing specifically encoding the Parameter Set information in Multipurpose Internet Mail Extensions (MIME) prior to being embedded within the SDP payload of the Hint track, in order to provide rich content communication including voice and video through internet. The Jones method, incorporating the Visharam embedding the parameter information in SDP payload, further incorporating the Mononen encoding the parameter information in Multipurpose Internet Mail Extensions (MIME) prior to being embedded within the SDP payload of the Hint track, has all the features of claim 28.

Regarding claim 39, the claimed invention is an apparatus claim corresponding to the method claim 28. Therefore, it is rejected for the same reason as claim 28.

 Claims 29-31, 33, 40-42, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones, further in view of MPEG 2001/N4858 (hereafter referenced as N4858).

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Regarding **claim 29**, Jones and Visharam disclose everything claimed as above (see claim 25). However, Jones and Visharam fail to disclose further comprising the step of transmitting the Parameter information in an out-of-band transmission.

In analogous field of endeavor, N4858 discloses Coding of Moving Pictures and Audio. N4858 specifically discloses transmitting the Parameter Set information in an out-of-band transmission (parameter sets are sent out of band), in order to transmit media in the cable environment.

Therefore, given this teaching, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Jones and Visharam by providing specifically transmitting the Parameter information in an out-of-band transmission, in order to transmit in the cable environment. The Jones method, incorporating the Visharam embedding the parameter information in SDP payload, further incorporating the N4858 transmitting the Parameter Set information in an out-of-band transmission for the cable, has all the features of claim 29.

Regarding claim 30, the Jones method, incorporating the Visharam embedding the parameter information in SDP payload, further incorporating the N4858 transmitting the Parameter Set information in an out-of-band transmission for the cable as applied to claim 4, discloses wherein said transmitting step transmits the parameter information using Transmission Control Protocol (TCP) (Jones: TCP/IP, col.13, line 67).

Regarding claim 31, the Jones method, incorporating the Visharam embedding the parameter information in SDP payload, further incorporating the N4858 transmitting the Parameter Set information in an out-of-band transmission for the cable as applied to

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claim 4, discloses wherein said transmitting step transmits the parameter information using Real Time Streaming Protocol (Jones: RTP, col.11, line 38-40).

Regarding claim 33, Jones and Visharam disclose everything claimed as above (see claim 25). However, Jones and Visharam fail to disclose wherein said transmitting step transmits the Parameter information prior to any media corresponding thereto.

N4858 discloses wherein said transmitting step transmits the Parameter information prior to any media corresponding thereto (Fig. 5b shows parameters transmitted before the picture slice (main media body), in order to inform the receiver to set up the presentation such as picture size and frame rate included in parameter set prior to transmitting the associated media (well known in the video compression art).

Therefore, given this teaching, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Jones and Visharam by providing specifically transmitting the Parameter Set information prior to any media associated with it, in order to inform the receiver to set up the presentation such as picture size and frame rate included in parameter set prior to transmitting the associated media. The Jones method, incorporating the Visharam embedding the parameter information in SDP payload, further incorporating the N4858 transmitting the Parameter Set information prior to any media associated with it, has all the features of claim 33.

Regarding claim 40, the claimed invention is an apparatus claim corresponding to the method claim 29. Therefore, it is rejected for the same reason as claim 29.

Regarding claim 41, the claimed invention is an apparatus claim corresponding to the method claim 30. Therefore, it is rejected for the same reason as claim 30.

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Regarding claim 42, the claimed invention is an apparatus claim corresponding to the method claim 31. Therefore, it is rejected for the same reason as claim 31.

Regarding claim 44, the claimed invention is an apparatus claim corresponding to the method claim 33. Therefore, it is rejected for the same reason as claim 33.

Conclusion

 THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

 Any inquiry concerning this communication or earlier communications from the examiner should be directed to HEE-YONG KIM whose telephone number is (571)270-3669. The examiner can normally be reached on Monday-Thursday, 8:00am-5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor. Christopher Kellev can be reached on 571-272-7331. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/HEE-YONG KIM/ Examiner, Art Unit 2482

/Andy S. Rao/ Primary Examiner, Art Unit 2486 April 21, 2011